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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/641,149	08/17/2000	Mark Gary Weinberg	CL1375 US NA CIP	4732

23906 7590 01/21/2004

E I DU PONT DE NEMOURS AND COMPANY  
LEGAL PATENT RECORDS CENTER  
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WILMINGTON, DE 19805

EXAMINER

SHOSHO, CALLIE E


ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. 09/641,149	Applicant(s) WEINBERG ET AL. 	
Examiner Callie E. Shosho	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9, 15, 31 and 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 15, 31 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

1. The double patenting rejections of record are overcome in light of the express abandonment of copending 10/343,274.

The following rejection is non-final in light of the use of the English translation of JP 01170641 which was previously unavailable as well as the 35 USC 112 rejection as set forth in paragraphs 2-3 below.

**Claim Rejections - 35 USC § 112**

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 31-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 31 recites "composition of claim 1 comprising up to 10 mol% oxyalkylene repeat units having adjacent methylene groups". The scope of the claim is confusing because it is not clear how the composition comprises oxyalkylene repeat units. It would appear that it is the polymer that comprises the oxyalkylene repeat units. Should claim 31 be amended to recite "composition of Claim 1 wherein the polymer comprises up to 10 mol% of oxyalkylene repeat units having adjacent methylene groups".

**Claim Rejections - 35 USC § 103**

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-9, 15, and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 01170641 in view of Moss (U.S. 4,698,372) and Suzuki (U.S. 4,158,450).

JP 01170641, an English translation of which is included in this office action, discloses composition comprising polyacetal resin, 1-100 parts filler having average particle size of 0.05-10 micrometers, which is oxide, hydroxide, carbonate, silicate, sulfate of group II or group III metal such as calcium carbonate, and 0.5-10% C<sub>12</sub>-C<sub>30</sub> fatty acid or salt thereof. The composition is used for interior of cars, i.e. shaped articles (pages 4-6 and 12).

Further, with respect to claims 31 and 32, it is noted that page 4 of the English translation of JP 01170641 discloses that the polyacetal resin that is used includes polyacetal copolymer while 8 of the translation discloses that the polyacetal resin utilized is known under the tradename Duracon which is well known, as disclosed by Suzuki (col.5, lines 47-51), as a polyacetal copolymer comprising ethylene oxide units. Further, it is noted that given that claim 31 recites "up to 10 mol%" oxyalkylene repeat units, this clearly encompasses 0-10% oxyalkylene units and thus, claims 31 and 32 also encompass embodiments wherein the polyacetal does not possess any oxyalkylene repeat units which is met by JP 01170641's disclosure of the use of polyacetal homopolymer.

The difference between JP 01170641 and the present claimed invention is (a) aspect ratio of calcium carbonate filler and (b) volume % filler.

With respect to difference (a), Moss, which is drawn to resin composition, disclose use of calcium carbonate filler with aspect ratio less than 2 in order to impart suitable reinforcing effects to the composition (col. 5, lines 21-23).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use calcium carbonate with aspect ratio less than 2 in JP 01170641 in order to produce composition with good reinforcement properties, and thereby arrive at the claimed invention.

With respect to difference (b), the present claims require about 1-30% by volume filler while JP 01170641 discloses the amount of filler in parts by weight not volume %.

However, given that broad range of filler disclosed by JP 01170641, i.e. 1-100 parts, it would have been natural for one of ordinary skill in the art to infer, absent evidence to the contrary, that this broad amount of mineral filler would overlap the presently claimed amount in volume %, and thus, one of ordinary skill in the art would have arrived at the claimed invention.

#### **Response to Arguments**

6. Applicants' arguments filed 10/14/03 have been fully considered but they are not persuasive.

Specifically, applicants argue that there is no motivation to combine JP 01170641 with Moss given that Moss discloses using filler with aspect ratio less than 2 to avoid undesirable reinforcing effects.

Applicants argue that contrary to examiner's position in the office action mailed 6/27/03, Moss does not use filler with aspect ratio less than 2 in order to impart reinforcement but rather Moss uses such filler in order to avoid undesirable reinforcing effects.

However, it is noted, as set forth on page 6 of the office action mailed 6/27/03 and paragraph 5 above, examiner stated that the motivation for using calcium carbonate filler with aspect ratio less than 2 in Moss was to impart suitable reinforcing effects. Col.4, lines 55-60 of Moss disclose that "pronounced" reinforcing tendencies are to be avoided because of the increase in stiffness and decrease in toughness associated with such, i.e. pronounced, reinforcement while col.5, lines 21-23 disclose using filler with aspect ratio less than 2 to avoid undesirable reinforcing effects. Thus, it is the examiner's position that Moss does not teach that all reinforcing effects are to be avoided but rather that pronounced reinforcing effects are to be avoided. There is no disclosure in Moss et al. that there is no reinforcing, only that there is no undesirable reinforcing. That is, the filler may provide reinforcement as long as such reinforcement does not result in an undesired increase in stiffness and decrease in toughness. Thus, Moss teaches using filler with aspect ratio less than 2 in order to impart suitable reinforcing effects whether such effects result in no reinforcement or some reinforcement.

Applicants argue that Moss teaches away from the present invention. However, given that there is no requirement in the present claims regarding whether or not the composition is reinforced or any requirement in the present claims regarding reinforcement, it is not clear how Moss teaches away from the present invention. Given that Moss disclose filler with identical aspect ratio as presently claimed, it is clear that the filler would provide same degree of reinforcement as filler presently claimed.

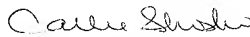
Applicants also argue that there is no disclosure in JP 01176041 of present invention given that all the examples of JP 01176041 utilize calcium carbonate with diameter of 4 microns

while the present claims require diameter of about 0.1 to less than 3.5 microns. However, "applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others." In re Courtright, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967). A fair reading of the reference as a whole paragraph bridging pages 4-5 of the translation) discloses that JP 01176041, an English translation of which is included in this office action, discloses the use of calcium carbonate with particle size of 0.05-10 microns which overlaps the presently claimed diameter.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Callie E. Shosho  
Primary Examiner  
Art Unit 1714